

| <div> <div></div> <div> <b>LEADER'S GUIDE</b><br/> <b>TO PREVENTION OF COLD INJURIES DUE TO EXPOSURE TO TEMPERATURES BELOW 50° F</b> </div> </div>                                                                                                                                                                                                |                                                                                                                             |                                                                        |                                                                    |                                                                                                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| INFORMATION ON THIS CARD IS PROVIDED TO ASSIST LEADERS IN RISK DECISION MAKING AND CONTROL DEVELOPMENT AS PART OF THE RISK MANAGEMENT PROCESS. RISK DECISIONS AND CONTROLS SHOULD BE DEVELOPED FOR ALL TRAINING. LEADERS MUST ENSURE THAT THESE RISK DECISIONS/CONTROLS ARE IMPLEMENTED INTO UNIT TRAINING PLANS AND THAT TRAINING IS SUPERVISED. |                                                                                                                             |                                                                        |                                                                    |                                                                                                                                                                                     |
| RECOMMENDATIONS                                                                                                                                                                                                                                                                                                                                   |                                                                                                                             |                                                                        |                                                                    |                                                                                                                                                                                     |
| MINIMUM UNIFORM                                                                                                                                                                                                                                                                                                                                   |                                                                                                                             |                                                                        |                                                                    | OTHER FACTORS                                                                                                                                                                       |
| WIND CHILL CATEGORY<br>(SEE REVERSE)                                                                                                                                                                                                                                                                                                              | FIELD UNIFORM                                                                                                               | PT UNIFORM                                                             | OFF DUTY ACTIVITIES                                                |                                                                                                                                                                                     |
| <b>LITTLE DANGER</b>                                                                                                                                                                                                                                                                                                                              | POLY PRO (T& B)<br>ECWCS** (T&B)<br>BALACLAVA<br>TRIGGER FINGER MITTENS<br>GORE-TEX BOOTS*                                  | PFU<br>SWEATS<br>BLACK KNIT CAP<br>BLACK GLOVES<br>W/INSERTS           | COAT<br>HAT<br>EAR PROTECTION<br>GLOVES<br>BOOTS                   | -- INCREASE LEADER SURVEILLANCE<br>-- NO FACIAL CAMOUFLAGE<br>-- INCREASE HYDRATION.<br>-- PROVIDE WARM-UP AREAS WITH HOT DRINKS, ETC.<br>-- SKIN COVERED AND DRY                   |
| <b>INCREASING DANGER</b>                                                                                                                                                                                                                                                                                                                          | POLY PRO (T& B)<br>COAT & TROUSER LINERS<br>ECWCS** (T&B)<br>BALACLAVA/PILECAP<br>ECW MITTENS<br>BOOTS ECW (TYPE I)         | PFU<br>SWEATS<br>POLY PRO (T&B)<br>BALACLAVA<br>TRIGGER FINGER MITTENS | COAT<br>HAT<br>EAR PROTECTION<br>GLOVES<br>BOOTS                   | -- RESTRICT NON-ESSENTIAL OUTDOOR TRAINING.<br>-- LOW ACTIVITY: 30-40 MIN WORK CYCLE.<br>-- SEDENTARY ACTIVITY: 15-20 MIN WORK CYCLE.<br>-- USE BUDDY SYSTEM.<br>-- NO EXPOSED SKIN |
| <b>GREAT DANGER</b>                                                                                                                                                                                                                                                                                                                               | POLY PRO (T& B)<br>SHIRT, COLD WX TROUSER LINER<br>ECWCS** (T&B)<br>BALACLAVA/PILECAP<br>ECW MITTENS<br>BOOTS ECW (TYPE II) | PFU<br>SWEATS<br>POLY PRO (T&B)<br>BALACLAVA<br>TRIGGER FINGER MITTENS | HEAVY COAT<br>LONG UNDERWEAR<br>HAT & SCARF<br>MITTENS<br>CW BOOTS | -- CONSIDER INDOOR TNG.<br>-- HIGH INTENSITY ACTIVITY: <15 MIN WORK CYCLE.<br>-- CONSIDER CANCELING LOW OR SEDENTARY ACTIVITY OUTDOOR TNG<br>-- COVER ALL EXPOSED SKIN              |
| * GORE-TEX BOOTS = Matterhorn/Rocky Mountain/or similar GORE-TEX insulated leather boots<br>** ECWCS = Extended Cold Weather Clothing System (GORE-TEX)                                                                                                                                                                                           |                                                                                                                             |                                                                        |                                                                    |                                                                                                                                                                                     |

# WIND CHILL CHART FOR FAHRENHEIT TEMPERATURES (°F)

## ACTUAL THERMOMETER READING (°F)

ESTIMATED  
WIND SPEED  
(IN MPH)

| 50<br>-40 | 40<br>-50 | 30<br>-60 | 20 | 10 | 0 | -10 | -20 | -30 |  |
|-----------|-----------|-----------|----|----|---|-----|-----|-----|--|
|-----------|-----------|-----------|----|----|---|-----|-----|-----|--|

## EQUIVALENT TEMPERATURE (°F)

**CALM**

50 40 30 20 10 0 -10 -20 -30 -40 -50 -60

**5**

48 37 27 16 6 -5 -15 -26 -47 -

**10**

40 28 16 4 -9 -21 -33 -46 -58 -70 -83 -95

**15**

36 22 9 -5 -18 -32 -45 -58 -72 -85 -99 -112

**20**

32 18 4 -10 -25 -39 -53 -67 -82 -96 -110 -124

**25**

30 16 0 -15 -29 -44 -59 -74 -88 -104 -118 -133

**30**

28 13 -2 -18 -33 -48 -63 -79 -94 -109 -125 -140

**35**

27 1 -4 -20 -35 -51 -67 -82 -98 -113 -129 -145

**40**

26 10 -6 -22 -37 -53 -69 -85 -100 -116 -132 -148

WINDS GREATER  
THAN 40 MPH HAVE  
LITTLE ADDITIONAL  
EFFECT

**LITTLE**

**DANGER**

< 5 hrs with dry skin

Greatest hazard from false security

**INCREASING DANGER**

Exposed flesh may freeze within 1 minute

**GREAT DANGER**

Exposed flesh may freeze within 30 seconds

Trenchfoot and Immersion foot may occur at any point on the body